

Health Habits of U.S. Adults, 1985: the "Alameda 7" Revisited

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Synopsis.....

Seven health habits, commonly referred to as the "Alameda 7," were shown to be associated with physical health status and mortality in a pioneer longitudinal study initiated in 1965 in Alameda County, CA. These habits are having never smoked, drinking less than five drinks at one sitting, sleeping 7-8 hours a night, exercising, maintaining desirable weight for height, avoiding snacks, and eating breakfast regularly. The Alameda study focused attention on the impor-

tance of everyday practices for the maintenance of good health and, ultimately, for longer life.

This report presents selected findings on the prevalence of the seven Alameda practices (defined slightly differently in some cases) among the general U.S. population aged 18 years and older, by sex, according to age, education, income, and race.

In general, men are more likely than women to smoke, drink, and exercise. Younger people are more likely than older people to skip breakfast, snack, and drink, and younger women are more likely than older women to smoke. Education, income, and racial differences were found for most health practices. Of all subgroups discussed, blacks, particularly black women, are the most likely to have lifestyles that would be considered unhealthy using the Alameda criteria. Overall, the data reported suggest that although large numbers of U.S. adults have healthy habits, many do not, particularly persons in socially and economically disadvantaged groups.

PERSONAL HEALTH HABITS SUCH AS drinking, smoking, and exercise have gained increasing attention over the past 20 years because of their potential impact on health and well-being—and, indeed, even survival. In the mid-1960s a study in Alameda County, CA, found that seven specific health habits, commonly referred to as the "Alameda 7," were related to both concurrent and subsequent health status and to long-term survival (1-4). The habits were having never smoked, drinking less than five drinks at one sitting, sleeping 7-8 hours a night, exercising, maintaining desirable weight for height, avoiding snacks, and eating breakfast regularly.

Although some evidence has suggested that breakfast and snacking habits are less important for future health than the other five habits (3), a 9½-year followup of the 1965 Alameda cohort found that people who followed each of the seven good habits tended to live longer than people who did not follow them (2). Further, the effects were additive: people having more of the good habits tended to live longer than people having fewer of them. Based on evidence from clinical studies,

mortality statistics, and population-based surveys, recognition of the importance of health behavior for good health has grown dramatically in recent years. Numerous studies at the national, State, and local levels have attempted to estimate the prevalence of selected health behaviors and provide the data necessary to help clarify the nature of their relationships to health status.

The National Health Interview Survey (NHIS) collected data on the seven Alameda County health habits in 1977, 1983, and 1985. Results from the 1977 and 1983 surveys for the total adult U.S. population have been published (5,6). This report will present data from the Health Promotion and Disease Prevention Survey (HPDP) of the 1985 NHIS, the most recent data available, for men and women, according to selected sociodemographic characteristics. The data are shown separately for men and women because these two groups, while similar in some practices, differ markedly in others—most notably smoking, alcohol consumption, and exercise. In all tables, estimates of the numbers of men and women in each population subgroup are presented in order that statistics may

'For this analysis, good health habits are defined as eating breakfast almost every day; rarely or never snacking; sleeping 7-8 hours a night; drinking less than five alcoholic beverages, on the average, on days the respondents drank in the past 2 weeks; not currently smoking cigarettes; maintaining desirable body weight; and exercising at a level of 3 or more kcal/kg/day, on the average, over the 2 weeks preceding the interview.'

be calculated for both sexes combined. These estimates exclude persons for whom data on a particular health habit are unknown.

This report will first describe the methods used in measuring the seven Alameda habits, then present selected highlights of sociodemographic differences for each of the habits, and finally, give a brief overview of noteworthy findings summarized by sex, age, education, income, and race. Some policy-relevant issues stimulated by the findings will also be briefly discussed.

Methods

The 1985 NHIS Health Promotion and Disease Prevention Survey included questions on each of the seven Alameda habits. Questions on smoking, sleep, eating breakfast, and snacking were similar to those used in earlier NHIS questionnaires and in the Alameda study; the measures of those habits used here are straightforward and comparable to measures used in earlier reports. The measures of alcohol consumption, exercise, and desirable weight, however, differ from those in earlier NHIS reports and thus comparisons with earlier data years are difficult to interpret. A discussion of the measurement of these habits follows.

Alcohol consumption. HPDP questions on alcohol consumption identified persons who had had at least one drink in the past year and then asked those people to report the average number of drinks that they had on days that they drank in the 2 weeks preceding the interview. The category "did not drink" includes persons who had not had

a drink in the past year and persons who had had a drink in the past year but had had no alcohol in the past 2 weeks. The indicator of an unfavorable drinking practice used in this report is having had five or more drinks, on the average, on days that the person drank in the past 2 weeks. This level of consumption could have been only on 1 day or it could have been on all 14 days.

Exercise. Questions on exercise were more detailed than those in earlier NHIS questionnaires. The 1985 survey attempted to measure actual exercise levels to the extent that respondents could report them. Respondents were asked whether they had participated in any of 22 specific physical activities, the number of times they had engaged in each in past 2 weeks, and the perceived increase in their heart rate while participating in the activity—none, small, moderate, or large. One method of synthesizing these data into a measure of physical activity is by converting them into kilocalories per kilogram per hour (kcal/kg/hr). For this analysis, a value representing energy requirements in kilocalories per kilograms per hour was assigned to each level of increase in heart rate for each activity or combination of activities listed in the HPDP questionnaire. The values assigned were based on guidelines developed by a panel of experts (7) and modified slightly for the NHIS. The number of kilocalories required for the activity was multiplied by the total time in hours (frequency x duration) in the past 2 weeks and the result then divided by 14 (the number of days in the recall period) to achieve a daily value. The result was summed across all activities to produce an estimate of the average number of kilocalories per kilogram per day expended. Using these estimates, respondents were classified as being sedentary (0.0-1.4 kcal/kg/day), moderately active (1.5-2.9 kcal/kg/day), or very active (3.0 or more kcal/kg/day). Examples of persons who would be classified as very active are those who reported walking with a moderate increase in heart rate for 45 minutes every day, or running or jogging with a large increase in heart rate for 15 minutes every day, or walking an hour on 7 of the 14 days with a moderate increase in heart rate and playing tennis with a small increase in heart rate for 2 hours on one other day.

Desirable weight. Data on body weight are based on self-reported height and weight, without shoes. Standards of desirable body weight used here were derived from the 1983 Metropolitan Life Insurance

Company (MLIC) tables, taking the midpoint of the medium frame category as the desirable weight for a particular height, with appropriate adjustments for differences in measurement techniques. The Alameda definition of desirable weight was, for men, weighing between 5 percent under to 19.9 percent over desirable weight and, for women, weighing any amount under desirable weight or less than 10 percent over desirable weight. The standards of desirable weight used in earlier NHIS reports (5,6) were derived from the 1960 MLIC tables. Overall, the 1983 MLIC standards showed about a 10-pound increase in desirable weight over 1960 levels. A discussion of the limitations of reported height and weight data (in contrast to measured height and weight) and potential problems with the use of life insurance standards is available elsewhere (6).

Data presented in this paper on desirable weight should be interpreted cautiously. The 1983 MLIC standards were used in this analysis because they are current and widely used estimates of desirable body weight for height. NHIS estimates of the proportion of the U.S. adult population in particular weight categories differ somewhat from estimates obtained by applying the same MLIC standards to the measured height and weight data from the second National Health and Nutrition Examination Survey (NHANES II), 1976-80. Determining whether these differences represent trends or whether methodological differences account for discrepancies is beyond the scope of this report.

Good health habits. In addition to detailed data on each of the seven Alameda health habits, this report presents total scores for good health habits by sex, according to age, education, income, and race. The health habit scores are patterned after those reported for the Alameda County study group, with some differences. For this analysis, good health habits are defined as eating breakfast almost every day; rarely or never snacking; sleeping 7-8 hours a night; drinking less than five alcoholic beverages, on the average, on days the respondents drank in the past 2 weeks; not currently smoking cigarettes (in the Alameda study, only having never smoked was considered a good habit); maintaining desirable weight; and exercising at a level of 3 or more kcal/kg/day, on the average, over the 2 weeks preceding the interview. The total score for good health habits was computed by counting the number of individual good habits reported.

Statistical measurements and relationships. The statistics in this report are simple prevalence estimates, unadjusted for age or other sociodemographic characteristics. Relationships between health habits and education, income, or race may be attributable, at least in part to differences in the age composition of particular population subgroups. Terms such as "similar" and "the same" are used to indicate that no statistical significance exists between the statistics being compared. Terms related to differences such as "greater than" or "less than" indicate that differences are statistically significant. The *t*-test with a critical value of 1.96 (.05 level of significance) was used to test all comparisons that are discussed. Lack of comment regarding the difference between two statistics does not mean that the difference was tested and found to be not significant.

Results

Highlights of 1985 findings on the Alameda seven health habits for U.S. men and women aged 18 years and over follow.

Eating breakfast. Survey findings on breakfast-eating habits are presented in table 1.

- More than half of U.S. adults ate breakfast daily.
- About one-fourth of U.S. adults rarely or never ate breakfast.
- Older persons were much more likely to eat breakfast daily than younger people.
- Whites were more likely to eat breakfast daily than blacks. The differences were particularly noteworthy for women; 58 percent of white women compared with 43 percent of black women ate breakfast daily.

Snacking. The statistical breakdown of respondents' snacking habits is given in table 2.

- Approximately 40 percent of U.S. men and women ate snacks daily.
- Almost 30 percent of U.S. men and women rarely or never ate snacks.
- Snacking habits were strongly associated with age: younger people were more likely to snack than older people, particularly young men.

Sleeping. A percent distribution of hours of sleep of those surveyed, by sex and selected characteristics is presented in table 3.

Table 1. Percent distribution for breakfast eating habits of persons 18 years of age and older, by sex and selected characteristics, United States, 1985

Characteristic	Men				Women			
	Number in thousands	Eat breakfast			Number in thousands	Eat breakfast		
		Almost every day	Some- times	Rarely or never		Almost every day	Some- times	Rarely or never
Total	80,062	54.4	20.4	25.2	89,809	56.4	20.0	23.6
Age								
18-29 years	23,270	42.6	27.4	30.0	24,649	41.1	28.2	30.8
30-44 years	24,666	44.4	23.8	31.8	26,102	47.1	24.3	28.5
45-64 years	21,093	62.3	16.3	21.4	23,206	62.5	16.2	21.4
65-74 years	7,264	85.7	5.9	8.4	9,358	83.4	7.1	9.5
75 years and older	3,770	88.4	6.2	5.4	6,494	90.7	4.3	5.0
Education								
Less than 12 years	18,953	59.2	17.5	23.3	22,147	59.2	18.7	22.1
12 years	28,511	50.3	22.3	27.3	37,567	52.8	21.4	25.8
More than 12 years	32,356	55.1	20.5	24.4	29,863	58.6	19.3	22.1
Income								
Less than \$7,000	6,125	54.8	22.0	23.3	10,346	56.6	21.6	21.8
\$7,000-\$14,999	11,056	59.7	17.1	23.2	15,227	58.5	18.9	22.6
\$15,000-\$24,999	16,807	53.9	21.1	25.1	17,905	54.2	21.0	24.8
\$25,000-\$39,000	21,082	51.0	22.3	26.6	19,422	53.1	21.5	25.5
\$40,000 or more	16,186	54.3	19.1	26.6	15,550	56.6	19.4	24.1
Race								
White	70,067	54.9	19.2	25.9	77,339	58.2	18.5	23.2
All other	9,995	50.8	29.3	19.9	12,470	44.8	29.3	25.9
Black	8,078	49.0	31.2	19.8	10,274	43.3	30.1	26.6

NOTE: Excludes persons with unknown breakfast habits.

SOURCE: 1985 National Health Interview Survey.

Table 2. Percent distribution for snacking habits of persons 18 years of age and older, by sex and selected characteristics, United States, 1985

Characteristic	Men				Women			
	Number in thousands	Eat snacks			Number in thousands	Eat snacks		
		Almost every day	Some- times	Rarely or never		Almost every day	Some- times	Rarely or never
Total	79,846	40.7	30.2	29.0	89,496	37.5	34.5	28.0
Age								
18-29 years	23,211	45.4	34.7	19.9	24,524	39.1	40.3	20.6
30-44 years	24,618	42.4	30.9	26.7	26,014	40.5	35.2	24.3
45-64 years	21,004	38.4	27.3	34.4	23,150	37.5	32.2	30.3
65-74 years	7,249	33.6	25.6	40.8	9,328	31.5	28.5	39.9
75 years and older	3,764	28.1	23.5	48.4	6,480	27.7	26.3	46.0
Education								
Less than 12 years	18,868	40.6	27.8	31.6	22,088	35.4	33.2	31.3
12 years	28,416	42.0	31.6	26.4	37,439	37.8	34.8	27.4
More than 12 years	32,319	39.7	30.5	29.7	29,737	38.7	34.9	26.4
Income								
Less than \$7,000	6,101	39.8	31.2	29.0	10,305	35.3	35.6	29.1
\$7,000-\$14,999	10,998	40.1	29.1	30.8	15,167	35.4	34.0	30.6
\$15,000-\$24,999	16,762	42.6	31.0	26.4	17,843	38.2	34.6	27.3
\$25,000-\$39,000	21,023	41.6	30.1	28.3	19,386	40.8	34.0	25.3
\$40,000 or more	16,182	40.8	27.6	31.6	15,475	39.0	33.9	27.2
Race								
White	69,902	41.2	29.5	29.2	77,105	37.8	33.8	28.5
All other	9,944	37.2	35.1	27.7	12,391	35.6	38.9	25.4
Black	8,051	38.4	35.4	26.2	10,202	36.2	38.0	28.8

NOTE: Excludes persons with unknown snacking habits.

SOURCE: 1985 National Health Interview Survey.

Table 3. Percent distribution for hours of sleep of persons 18 years of age and older, by sex and selected characteristics, United States, 1985

Characteristic	Men				Women			
	Number in thousands	Hours of sleep			Number in thousands	Hours of sleep		
		6 hours or less	7-8 hours	9 hours or more		6 hours or less	7-8 hours	9 hours or more
Total	79,788	22.7	66.3	11.0	89,339	21.4	65.7	12.9
<i>Age</i>								
18-29 years	23,249	21.7	65.8	12.5	24,595	18.0	65.8	16.2
30-44 years	24,623	26.7	68.0	5.4	26,079	22.0	69.5	8.6
45-64 years	21,012	22.6	67.7	9.7	23,102	22.8	67.1	10.1
65-74 years	7,231	15.6	64.3	20.1	9,238	23.0	60.9	16.2
75 years and older	3,673	16.5	55.1	28.4	6,325	24.4	52.1	23.6
<i>Education</i>								
Less than 12 years	18,809	22.0	58.2	19.8	21,856	24.5	57.4	18.1
12 years	28,449	23.2	65.9	10.8	37,481	20.8	66.4	12.8
More than 12 years	32,299	22.6	71.5	5.9	29,796	19.8	71.1	9.1
<i>Income</i>								
Less than \$7,000	6,073	22.9	57.0	20.0	10,200	25.2	54.6	20.2
\$7,000-\$14,999	11,043	20.7	62.4	16.9	15,160	22.3	62.3	15.3
\$15,000-\$24,999	16,757	21.5	69.9	11.6	17,866	20.8	65.7	13.4
\$25,000-\$39,000	21,053	24.1	68.5	7.4	19,397	20.5	69.1	10.4
\$40,000 or more	16,155	23.9	69.3	6.8	15,539	19.6	71.9	8.5
<i>Race</i>								
White	69,871	21.7	67.8	10.4	77,023	20.9	67.0	12.1
All other	9,918	29.4	55.7	14.9	12,317	24.5	57.3	18.2
Black	8,014	31.0	52.5	16.5	10,143	25.3	55.4	19.3

NOTE: Excludes persons with unknown hours of sleep.

SOURCE: 1985 National Health Interview Survey.

- Two-thirds of men and women reported sleeping 7-8 hours a night.
- More than 20 percent of men and women reported sleeping 6 hours a night or less.
- Sleeping habits were strongly associated with education: men and women with more than 12 years of education were more likely to sleep 7-8 hours a night than were persons with fewer years of education.
- Persons with higher family incomes were more likely to sleep 7-8 hours a night than were lower income persons.
- Whites were more likely to sleep 7-8 hours a night than blacks.

Alcohol consumption. The average number of drinks consumed in a 2-week period is shown by selected respondent characteristics in table 4.

- Men were about four times more likely to report having had five or more drinks on days that they drank (10.1 percent) than women (2.5 percent). Women were much more likely to report that they did not drink any alcohol in the past 2 weeks (60 percent) than men (39 percent).
- Younger men and women were much more likely

to report consuming five or more drinks on days that they drank than older persons.

- Men with less than 12 years of education were more likely to report not drinking alcohol in the past 2 weeks (54 percent) than men with post-high school education (30 percent).
- Women with less than 12 years of education were more likely to report not drinking in the past 2 weeks (77 percent) than women with post-high school education (46 percent).
- Men and women with 12 years of education or less were more likely to have had five or more drinks on days that they drank than persons with more than 12 years of schooling.
- Low-income men and women were more likely than higher income persons to report not drinking alcohol in the past 2 weeks; men and women in the higher income groups more often reported drinking one or two drinks on the average.

Smoking. The smoking status of those persons surveyed is shown in detail in table 5.

- Approximately 33 percent of men and 28 percent of women reported currently smoking cigarettes.
- Among young persons, aged 18-29 years, men

Table 4. Percent distribution for average number of drinks consumed on days respondents drank in past 2 weeks by persons 18 years of age and older, United States, 1985

Characteristic	Men					Women				
	Number in thousands	Did not drink	Average number per day			Number in thousands	Did not drink	Average number per day		
			1-2 drinks	3-4 drinks	5 or more drinks			1-2 drinks	3-4 drinks	5 or more drinks
Total	79,987	38.7	35.5	15.7	10.1	89,525	59.7	30.1	7.8	2.5
Age										
18-29 years	23,393	31.7	30.2	21.7	16.4	24,558	51.9	28.9	13.9	5.3
30-44 years	24,629	32.4	39.0	18.0	10.6	26,022	54.0	35.1	8.4	2.5
45-64 years	20,970	44.2	37.9	11.4	6.5	23,125	62.5	31.8	4.8	1.0
65-74 years	7,240	52.3	37.4	7.6	2.7	9,308	72.6	25.2	1.7	0.5
75 years and older	3,755	67.1	27.5	4.0	1.4	6,512	83.4	15.3	1.1	0.2
Education										
Less than 12 years	18,952	54.3	25.1	10.5	10.0	22,092	77.2	15.0	5.0	2.8
12 years	28,445	38.1	31.8	17.6	12.5	37,412	60.0	28.6	8.5	2.9
More than 12 years	32,327	29.9	44.9	17.2	7.9	29,759	46.0	43.3	8.9	1.8
Income										
Less than \$7,000	6,106	48.7	23.2	14.1	14.0	10,285	70.8	18.0	7.5	3.8
\$7,000-\$14,999	11,034	48.8	27.0	13.5	10.7	15,187	68.6	21.8	6.7	3.0
\$15,000-\$24,999	16,781	40.6	32.2	15.6	11.7	17,773	62.0	26.8	8.4	2.8
\$25,000-\$39,999	21,015	35.0	38.2	17.5	9.2	19,420	54.0	35.3	8.4	2.3
\$40,000 or more	16,219	26.5	46.5	17.9	9.0	15,535	42.6	46.5	9.2	1.7
Race										
White	69,950	37.2	36.1	16.2	10.6	77,151	57.6	31.7	8.2	2.6
All other	10,037	49.4	31.3	12.8	6.5	12,374	72.9	20.0	5.2	1.9
Black	8,103	47.6	32.2	13.5	6.8	10,209	71.6	21.1	5.4	1.9

NOTE: Excludes persons with unknown drinking habits.

SOURCE: 1985 National Health Interview Survey.

Table 5. Percent distribution for smoking status of persons 18 years of age and older, by sex and selected characteristics, United States, 1985

Characteristic	Men				Women			
	Number in thousands	Smoking status			Number in thousands	Smoking status		
		Never	Former	Current		Never	Former	Current
Total	78,989	36.5	30.9	32.6	87,911	54.0	18.2	27.8
Age								
18-29 years	23,024	54.4	13.4	32.2	23,783	55.6	12.9	31.5
30-44 years	24,357	33.5	28.4	38.0	25,632	50.5	18.3	31.2
45-64 years	20,742	24.6	42.0	33.4	22,899	48.7	21.4	29.9
65-74 years	7,164	24.9	53.2	21.9	9,257	58.7	23.5	17.9
75 years and older	3,702	33.9	51.1	15.0	6,340	75.1	17.9	7.1
Education								
Less than 12 years	18,480	24.9	35.0	40.1	21,521	53.2	15.5	31.3
12 years	28,220	34.5	28.9	36.6	36,816	51.7	17.2	31.0
More than 12 years	32,073	44.9	30.3	24.8	29,380	57.4	21.4	21.2
Income								
Less than \$7,000	6,059	42.3	23.1	34.6	10,123	57.5	13.6	29.0
\$7,000-\$14,999	10,851	30.9	31.2	37.9	14,941	53.2	16.6	30.2
\$15,000-\$24,999	16,636	35.5	29.8	34.7	17,467	53.0	17.2	29.8
\$25,000-\$39,000	20,888	36.7	30.9	32.5	19,041	53.3	19.4	27.3
\$40,000 or more	16,064	39.2	34.9	26.0	15,387	52.2	23.4	24.4
Race								
White	69,132	35.9	32.4	31.7	75,839	53.1	19.2	27.7
All other	9,857	40.7	20.6	38.6	12,073	59.7	11.8	28.5
Black	7,978	39.2	20.9	39.8	9,945	57.1	12.0	30.9

NOTE: Excludes persons with unknown smoking status.

SOURCE: 1985 National Health Interview Survey.

Table 6. Percent distribution by desirable body weight of persons 18 years and older, according to sex and selected characteristics, United States, 1985

Characteristic	Desirable body weight							
	Number in thousands	10 percent or more below	5-9.9 percent below	± 4.9 percent	5-9.9 percent above	10-19.9 percent above	20-29.9 percent above	30 percent or more above
Men								
Total	77,375	7.2	7.9	23.1	14.2	21.6	13.8	12.1
<i>Age</i>								
18-29 years	22,321	12.3	12.7	31.0	13.4	15.0	7.9	7.7
30-44 years	23,731	4.6	6.7	21.8	15.6	22.7	15.0	13.6
45-64 years	20,589	3.6	4.5	17.3	13.4	26.3	18.6	16.4
65-74 years	7,078	6.6	5.8	19.3	14.3	25.3	17.4	11.3
75 years and older	3,655	14.3	9.3	24.6	15.2	21.0	8.4	7.3
<i>Education</i>								
Less than 12 years	18,377	10.0	7.2	21.4	12.5	20.4	14.6	13.9
12 years	27,598	6.7	8.6	22.3	13.8	21.5	13.9	13.1
More than 12 years	31,201	6.0	7.7	24.8	15.6	22.5	13.3	10.2
<i>Income</i>								
Less than \$7,000	5,847	15.9	11.5	26.5	12.6	14.6	8.1	10.7
\$7,000-\$14,999	10,588	10.0	9.4	23.2	12.4	19.5	12.5	12.9
\$15,000-\$24,999	16,344	6.6	8.6	23.4	14.2	21.3	13.3	12.5
\$25,000-\$39,999	20,482	5.4	7.0	21.9	14.2	23.8	15.6	12.2
\$40,000 or more	15,689	4.9	6.2	22.5	15.7	23.7	15.3	11.6
<i>Race</i>								
White	67,861	6.7	7.7	22.7	14.2	22.2	14.2	12.3
All other	9,514	10.4	9.5	26.3	14.1	17.4	11.2	11.1
Black	7,641	8.3	8.3	25.4	14.2	19.0	12.0	12.8
Women								
Total	87,296	20.3	12.1	23.1	9.5	12.8	8.6	13.7
<i>Age</i>								
18-29 years	24,147	31.5	15.5	24.1	7.8	8.7	5.2	7.2
30-44 years	25,374	20.9	13.9	23.1	9.2	11.7	7.7	13.5
45-64 years	22,552	10.6	8.9	22.9	11.1	15.5	11.4	19.6
65-74 years	9,043	12.0	7.9	22.3	9.8	17.9	12.4	17.7
75 years and older	6,181	20.7	10.0	20.4	11.2	15.7	9.9	12.1
<i>Education</i>								
Less than 12 years	21,381	15.3	8.0	18.8	9.9	15.4	11.9	20.6
12 years	36,646	19.4	11.6	23.6	10.1	13.1	8.5	13.7
More than 12 years	29,080	24.8	15.8	25.6	8.5	10.4	6.3	8.5
<i>Income</i>								
Less than \$7,000	9,962	18.6	9.3	19.9	9.0	13.8	10.2	19.2
\$7,000-\$14,999	14,916	17.9	9.8	21.2	9.1	14.2	10.8	17.0
\$15,000-\$24,999	17,478	20.5	11.7	22.4	9.9	12.7	8.7	14.3
\$25,000-\$39,999	18,977	20.6	13.9	24.8	9.3	12.2	7.2	11.9
\$40,000 or more	15,164	23.3	15.4	25.6	9.8	11.9	7.0	7.0
<i>Race</i>								
White	75,337	20.8	12.6	23.5	9.7	12.6	8.2	12.6
All other	11,959	17.1	9.1	20.1	8.4	13.9	10.9	20.7
Black	9,833	11.6	8.4	20.3	9.0	15.1	12.3	23.2

NOTE: Excludes persons with unknown height or weight.

SOURCE: 1985 National Health Interview Survey.

and women reported similar smoking habits; about 32 percent of both groups were current smokers.

- Among all population subgroups, smoking rates were highest for men aged 30-44 years (38 percent), men with less than 12 years of education (40 percent), and nonwhite men (39 percent).

- Men and women with more than 12 years of education were less likely to smoke than persons

with fewer years of schooling.

- Persons with higher incomes were less likely to be current smokers than persons with lower incomes.

- Black men were more likely to smoke (40 percent) than white men (32 percent); black women were more likely to smoke (31 percent) than white women (28 percent).

Table 7. Percent distribution for leisure time physical activity levels of persons 18 years of age and older, by sex and selected characteristics, United States, 1985

Characteristic	Men				Women			
	Number in thousands	Activity level ¹			Number in thousands	Activity level ¹		
		Sedentary	Moderately active	Very active		Sedentary	Moderately active	Very active
Total	80,779	49.3	16.5	34.1	90,192	61.8	16.3	21.9
Age								
18-29 years	23,569	35.3	16.2	48.5	24,756	51.8	17.9	30.3
30-44 years	24,891	48.6	18.5	32.9	26,201	58.3	18.2	23.5
45-64 years	21,215	59.7	15.3	25.0	23,297	66.3	15.3	18.4
65-74 years	7,311	54.6	16.7	28.6	9,381	69.9	15.1	15.0
75 years and older	3,794	73.1	12.7	14.1	6,558	85.2	8.1	6.8
Education								
Less than 12 years	19,186	64.2	12.7	23.1	22,244	73.6	11.9	14.5
12 years	28,736	49.7	17.1	33.2	37,740	62.0	16.1	21.9
More than 12 years	32,594	40.0	18.4	41.6	29,942	52.5	19.8	27.7
Income								
Less than \$7,000	6,223	50.5	12.8	36.8	10,386	66.9	13.9	19.2
\$7,000-\$14,999	11,158	54.4	15.0	30.5	15,277	64.7	14.4	20.9
\$15,000-\$24,999	16,914	51.6	16.5	31.9	17,939	61.5	17.0	21.5
\$25,000-\$39,999	21,212	47.8	17.2	34.9	19,503	58.6	17.2	24.2
\$40,000 or more	16,312	40.3	19.2	40.4	15,595	53.1	19.5	27.4
Race								
White	70,582	48.9	16.8	34.2	77,657	60.9	16.7	22.4
All other	10,197	52.0	14.7	33.3	12,536	67.0	14.1	18.9
Black	8,247	52.7	13.6	33.8	10,333	66.8	14.1	19.2

¹Activity level: Sedentary, 0.0-1.4 kcal/kg/day; moderately active, 1.5-2.9 kcal/kg/day; very active, 3.0 or more kcal/kg/day.

unknown.

SOURCE: 1985 National Health Interview Survey.

NOTE: Excludes persons for whom all leisure time physical activity data are

'Of all subgroups discussed in this report, blacks, particularly black women, are most likely to have lifestyles that would be considered unhealthy using Alameda criteria; only 7 percent of black men and 4 percent of black women reported six or seven good health habits, and almost half of blacks reported three or fewer good habits.'

Desirable weight. Table 6 presents data obtained from questions on height and weight. (See Methods section for cautions in interpreting these data.)

- Less than one-fourth of men and women reported body weights that were within 5 percent of their desirable weight for height, according to 1983 MLIC standards.
- Fifty-nine percent of men and 65 percent of women reported weights that could be classified as

desirable according to the Alameda study's criteria (see Methods section for definition).

- Twenty-six percent of men and 22 percent of women were 20 percent or more above desirable weight.
- Women were twice as likely as men to be 5 percent or more below desirable weight (32 percent and 15 percent, respectively).
- Younger women, aged 18-29 years, were more than twice as likely to be 5 percent or more below desirable weight (47 percent) than women aged 45-74 years (20 percent).
- Among women, weighing 30 percent or more above desirable weight was associated with being aged 45-64 years, having less than 12 years of education, having a low income, and being black.
- Among men, weighing 30 percent or more above desirable weight was most common among those aged 45-64 years.

Physical activity. Levels of leisure time physical activity are given in table 7 according to sex and selected characteristics.

- About 34 percent of men and about 22 percent of women were classified as very active; 17 percent

Table 8. Percent distribution for total number of good health habits of persons 18 years of age and older by sex and selected characteristics, United States, 1985

Characteristic	Men					Women				
	Number in thousands	Number of good habits				Number in thousands	Number of good habits			
		0-3	4	5	6-7		0-3	4	5	6-7
Total	80,779	36.6	27.8	23.4	12.2	90,192	33.3	30.9	24.8	11.1
<i>Age</i>										
18-29 years	23,569	40.2	27.5	22.4	9.8	24,756	35.7	31.2	23.1	10.1
30-44 years	24,891	41.6	27.9	20.5	10.0	26,201	36.3	29.7	23.3	10.7
45-64 years	21,215	34.4	28.2	24.7	12.7	23,297	35.8	29.6	24.0	10.6
65-74 years	7,311	21.7	26.4	30.1	21.7	9,381	23.4	33.6	29.4	13.6
75 years and older	3,794	22.3	29.8	28.2	19.7	6,558	17.8	35.0	33.0	14.0
<i>Education</i>										
Less than 12 years	19,186	43.4	28.5	19.8	8.3	22,244	41.6	31.3	20.3	6.8
12 years	28,736	41.2	27.2	22.1	9.5	37,740	34.8	32.3	23.6	9.3
More than 12 years	32,594	28.5	28.0	26.7	16.8	29,942	25.1	28.8	29.7	16.4
<i>Income</i>										
Less than \$7,000	6,223	41.7	28.1	22.0	8.3	10,386	39.9	31.6	21.7	6.8
\$7,000-\$14,999	11,158	39.9	27.8	21.9	10.3	15,277	35.0	32.4	23.4	9.1
\$15,000-\$24,999	16,914	38.0	28.6	22.1	11.3	17,939	35.0	31.3	23.6	10.1
\$25,000-\$39,999	21,212	35.9	27.7	24.2	12.1	19,503	31.7	30.5	26.0	11.8
\$40,000 or more	16,312	31.0	26.4	25.5	17.1	15,595	27.2	28.3	28.0	16.5
<i>Race</i>										
White	70,582	35.7	27.6	23.8	12.9	77,657	31.3	30.9	25.9	11.9
All other	10,197	43.0	29.5	20.5	7.1	12,536	45.4	30.9	17.6	6.1
Black	8,247	46.2	27.4	19.4	6.9	10,333	48.8	31.2	15.6	4.4

NOTE: Excludes persons for whom data on all health habits are unknown.

SOURCE: 1985 National Health Interview Survey.

of men and 16 percent of women were classified as moderately active; and 49 percent of men and 62 percent of women were classified as sedentary in 1985.

- Men were more likely to be very active than women in every age group.
- Rates of being very active ranged from 49 percent of men and 30 percent of women aged 18-29 years to 14 percent of men and 7 percent of women in the oldest age group (75 years and over).
- Men and women with more than 12 years of education were almost twice as likely to be very active as were persons with less than 12 years of education.
- With the exception of men earning less than \$7,000 a year, higher income people tended to be more active than lower income people.

Health practice scores.

- Twelve percent of men and 11 percent of women had six or seven good health habits; more than half of both men and women reported four or five good habits; and 37 percent of men and 33 percent of women had zero to three good habits. Overall,

persons in the older age groups were more likely to have a greater number of good habits than younger people.

- The total number of good habits was also positively associated with education and income for both men and women.
- Blacks tended to have fewer good habits than whites: 46 percent of black men and 49 percent of black women, compared with 36 percent of white men and 31 percent of white women, had three or fewer good health habits. Only 4 percent of black women had scores of six or seven good habits, compared with 12 percent of white women.

Summary

These data suggest that there are important differences in health practices among population subgroups. Some findings, especially for education and income, may be due in part to differing age distributions, as these data were not age-adjusted. Overall, men are more likely than women to smoke, drink alcohol and drink five or more drinks on days that they drink, and to exercise. Younger people are more likely than older people to skip breakfast, eat snacks, drink alcohol, and

drink five or more drinks on days that they drink; and younger women are more likely than older women to smoke cigarettes. Persons with less than 12 years of education are more likely than persons with more than 12 years to smoke cigarettes, sleep 9 or more hours, be 30 percent or more above desirable weight (particularly women) and be sedentary; they are less likely to drink alcohol. Lower income persons are more likely than higher income persons to sleep 9 or more hours, drink five or more drinks on drinking days, smoke cigarettes, and be sedentary; lower income women are more likely than higher income women to be 30 percent or more above desirable weight.

Whites are more likely than blacks to eat breakfast daily, sleep 7-8 hours a night, and have five or more drinks on days that they drink. Blacks are more likely than whites to smoke and be sedentary, and black women are almost twice as likely as white women to be 30 percent or more above desirable weight. Of all subgroups discussed in this report, blacks, particularly black women, are most likely to have lifestyles that would be considered unhealthy using Alameda criteria; only 7 percent of black men and 4 percent of black women reported six or seven good health habits, and almost half of blacks reported three or fewer good habits.

Overall, these data suggest that although large numbers of U.S. adults have healthy habits, many do not, particularly persons in the more socially and economically disadvantaged groups. The implications of these findings for future policy decisions merit analysis.

Future Directions

In addition to the data presented in this report, the basic NHIS questionnaire has a number of health status measures such as number of restricted activity days, number of bed days, limitation of activity, and perceived health status. It also has information on health care utilization such as physician contacts, hospital episodes, and length of hospital stay. These data provide a unique opportunity for cross-sectional analysis of the relationships between health habits and health status for the general U.S. population.

The items in the 1985 Health Promotion and Disease Prevention Survey will be repeated in the 1990 NHIS, permitting trends in the prevalence of health habits to be analyzed. In addition, funds will be sought to followup a subset of the 1985 respondents in 1990, using the same questionnaire,

in order to analyze the association between particular health behaviors and changes in health status over time. Finally, in line with the approach used in the Alameda County survey, mortality statistics for the 1985 cohort will be obtained, using the National Death Index, thereby permitting an estimate of mortality rates associated with harmful health behaviors. There is tremendous potential for further analysis of these data, and their use by the research community is encouraged.

NOTE: The design of the survey is described in detail in "The 1985 Health Promotion and Disease Prevention Survey" by Owen T. Thornberry, Ronald W. Wilson, and Patricia M. Golden, *Public Health Reports* 101: 566-570, November-December 1986.

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